

## Claims

1. An indium oxide-tin oxide powder comprising an In-Sn oxide as a predominant component, characterized in that the oxide powder contains no compound oxide ( $In_4Sn_3O_{12}$ ) detectable through X-ray diffraction and has a  $SnO_2$  solid solution amount in  $In_2O_3$  of 2.3 mass% or more, the  $SnO_2$  solid solution amount being calculated from the ratio between integral diffraction intensity attributed to  $In_2O_3$  (222) and integral diffraction intensity attributed to  $SnO_2$  (110), and the ratio between  $In_2O_3$  content and  $SnO_2$  content obtained from an In element concentration and a Sn element concentration through ICP analysis.
2. An indium oxide-tin oxide powder according to claim 1, wherein the  $SnO_2$  solid solution amount in  $In_2O_3$  is 2.4 mass% or more.
3. An indium oxide-tin oxide powder according to claim 1 or 2, which has a tin content of 2.3 to 45 mass% as calculated on the basis of  $SnO_2$ .
4. An indium oxide-tin oxide powder according to any of claims 1 to 3, which is produced through feeding, into an oxidizing atmosphere serving as a heat source, an indium-tin alloy in the form of a liquid stream, liquid droplets, or powder or an ITO powder; and capturing and collecting the formed product in the form of microparticles by means of a fluid.
5. An indium oxide-tin oxide powder according to claim

4, wherein the fluid is a fluid of atomized liquid.

6. An indium oxide-tin oxide powder according to claim 4 or 5, wherein the formed microparticles flow at a maximum speed of 150 m/sec or less, when the microparticles are captured by means of the liquid fluid.

7. A sputtering target characterized by being produced through sintering an indium oxide-tin oxide powder as recited in any of claims 1 to 6.